

CLAIMS:

1. A toy vehicle, comprising:
 - a chassis;
 - a wheel assembly including first and second wheels pivotally mounted to the chassis; and
 - a steering mechanism mounted on the chassis and operatively connected to the first and second wheels for steering the wheels, the steering mechanism including a steering module having:
 - a) a coil disposed on the chassis residing in a frame, the coil having a first end and a second end with a central axis extending between the first and second ends thereof;
 - b) a first bar disposed adjacent the first end of the coil and extending along a first substantially longitudinal linear axis generally perpendicular to the central axis of the coil;
 - c) first and second magnets mounted on the first bar along the first substantially linear axis, the first and second magnets each including a north pole and a south pole, the north pole of the first magnet facing the first end of the coil and the south pole of the second magnet facing the first end of the coil.
2. The toy vehicle according to claim 1, wherein the steering module includes a biasing mechanism that biases a portion of the steering module in a central position.
3. The toy vehicle according to claim 2, wherein the biasing mechanism includes at least one metal rod operatively connected with the first bar and engaged with the frame, the at least one metal rod extending across and overlapping the first bar, and the at least one metal rod being rollable along the first longitudinal linear axis of the first bar.

4. The toy vehicle according to claim 2, wherein the portion of the steering module comprises the first bar, and first and second magnets.

5. The toy vehicle according to claim 2, wherein the portion of the steering module comprises the frame and the coil.

6. The toy vehicle according to claim 1, wherein the first bar includes a first end operatively connected to the first wheel and a second end operatively connected to the second wheel, whereby movement of the first bar along the first substantially linear axis results in pivoting movement of the first and second wheels.

7. The toy vehicle according to claim 1, wherein the frame includes a first side operatively connected to the first wheel and a second side operatively connected to the second wheel, whereby movement of the frame and coil along the first linear axis defined by the first bar results in pivoting movement of the first and second wheels.

8. The toy vehicle according to claim 1, wherein the first and second wheels are front wheels of the toy vehicle, and the wheels are each rotatable about a respective rotation axis, and wherein the coil, the first bar and the first and second magnets are disposed entirely forward or entirely rearward of the rotation axis.

9. The toy vehicle according to claim 1, wherein the wheel assembly includes a bar member having a socket member disposed on each end of the bar member, each socket member being operatively connected with a ball member, each ball member being operatively connected with a socket portion, the socket portions defining a first and second socket portion each connected with a spindle portion.

10. The toy vehicle according to claim 9, wherein the first socket portion is operatively connected with the first wheel and the second socket portion is operatively

connected to the second wheel, the first and second wheels each include a boss extending outwardly from a side, the boss being insertable through a through hole of the spindle portion and including a hole being connectable with one of the socket portions, thereby connecting the wheel, spindle, and bar member together to form the wheel assembly.

11. The toy vehicle according to claim 9, wherein the bar member includes a gear member disposed between the ends, the gear member enabling driving of the wheel assembly.

12. The toy vehicle according to claim 9, wherein the spindle portion enabling steering of the wheel assembly.

13. The toy vehicle according to claim 1, comprising a trailer portion, the trailer portion including a gear assembly for facilitating turning of the toy vehicle; the gear assembly includes a first gear and a second gear both simultaneously driven by a driving gear, the first and second gears simultaneously rotate in opposite directions, and the driving gear being operatively connected with a motor on the trailer portion.

14. A wheel assembly for a toy vehicle comprising:
a bar member including a first end and a second end;
a spindle portion connected at each of the first and second ends of the bar member; and
first and second wheels, the first wheel being operatively connected to the first end of the bar member and the second wheel being operatively connected to the second end of the bar member.

15. The wheel assembly for a toy vehicle according to claim 14, wherein the bar member having a socket member disposed on each of the first end and the second end of the bar member, the socket members each being operatively connected

with a ball member, the ball members each being operatively connected with a socket portion.

16. The wheel assembly for a toy vehicle according to claim 15, wherein the socket portions being insertable through a through hole in each of the spindle portions, the socket portions defining a first and a second socket portion, the first socket portion being insertable into a boss having a hole of the first wheel and the second socket portion being insertable into a boss having a hole of the second wheel.

17. The wheel assembly for a toy vehicle according to claim 14, wherein the spindle portions enabling steering of the wheel assembly.

18. The wheel assembly for a toy vehicle according to claim 14, wherein the bar member includes a gear member disposed between the first and second ends, the gear member enabling driving of the wheel assembly.

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19. A trailer portion for a toy vehicle comprising:
a bed containing a power source and a motor;
a gear assembly residing in a housing and including
a first gear;
a second gear; and
a driving gear that drives both the first and second gears;
the first and second gears rotating in opposite directions when driven by the driving gear; and the gear assembly operatively connected with the motor;